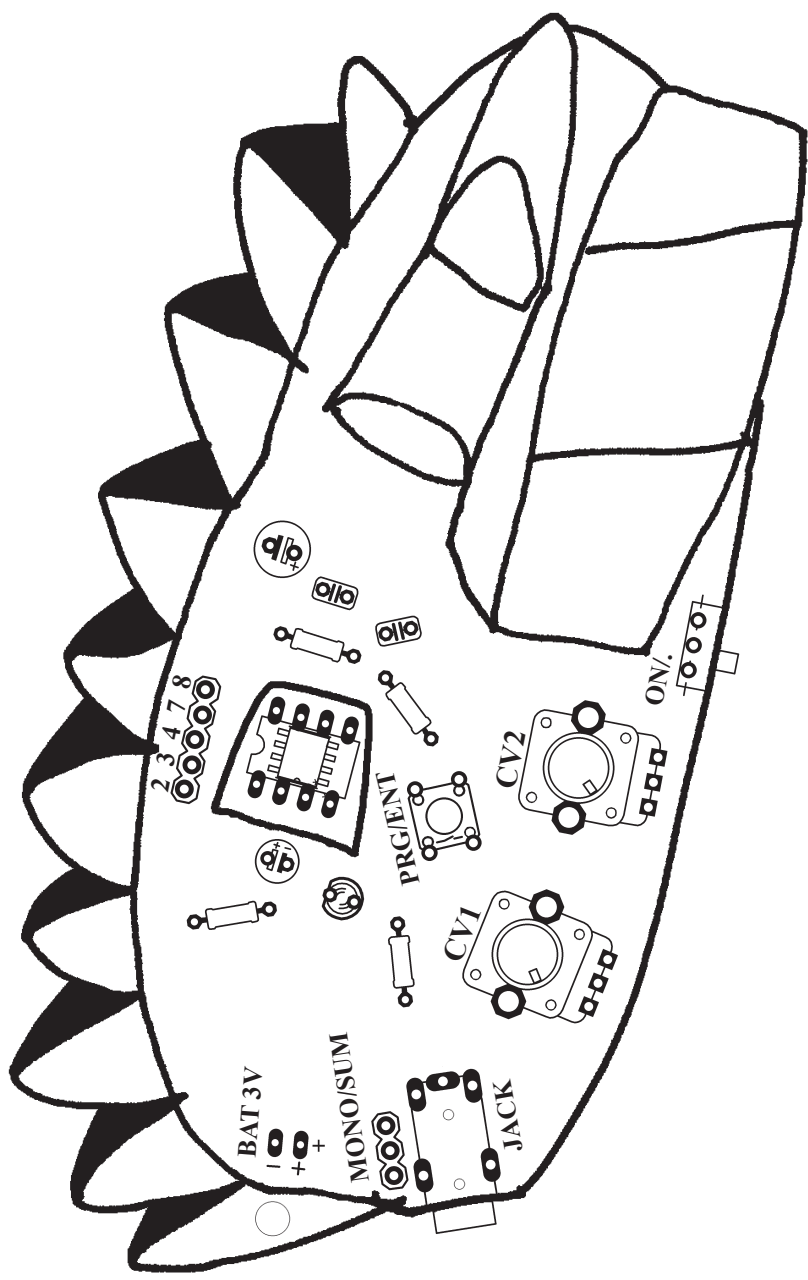


MORE ROAR!



MORE ROAR! USER GUIDE

Dirty Electronics, Agnes Cameron & Tellamont

MORE ROAR! is an entropic synthesiser and degenerative artwork.

The more you play it, the more its sounds degrade, become re-ordered. Every restart, a different rate of degradation. ‘Raw’ sound weathered into noise and silence.

MORE ROAR! is a collaboration between Dirty Electronics and Agnes Cameron with printed circuit board artwork by Tellamont.

More ...

Digital synth

FM

Artwork circuit board

Pocket size

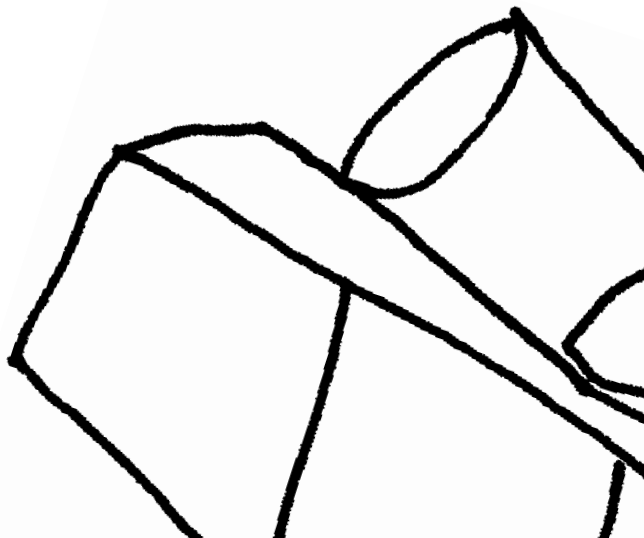
Stand-alone

Battery powered

Line/headphone output

Hackable/CV in

Open-source



PROGRAMS AND GROUPS

MORE ROAR! has **9 PROGRAMS** categorised into **3 GROUPS** (3 programs per group):

weathered

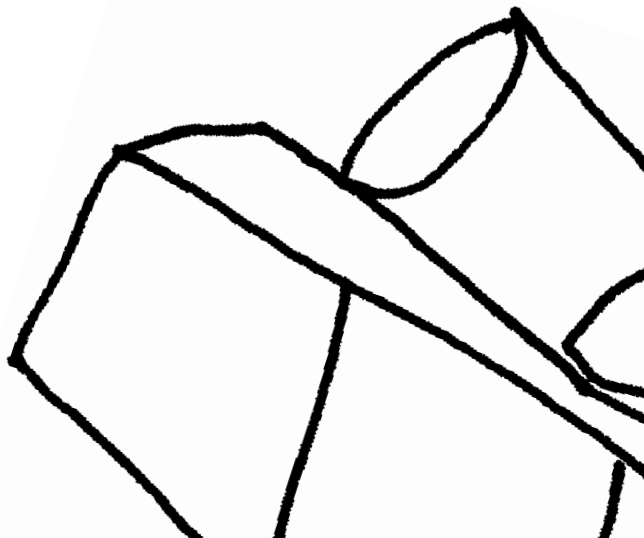
pitched

scattered

Each program is made up of a core waveform and modulation type.

A group is initialised based on the value of **CV2** at power on and reset.

The **PRG/ENT** advance button selects in turn and loops through the 3 programs within the initialised group.



ENTROPIES

There are **6 ENTROPY FUNCTIONS**:

triangle_smash - waveform mashup

XOR - bitwise operation (waveshape/reshape)

top2bottom - waveform inversion

bitcrush - waveform resolution reduction

clip - amplitude clipping (DC offset)

shuffle - random shuffle elements of wavetable (noise)

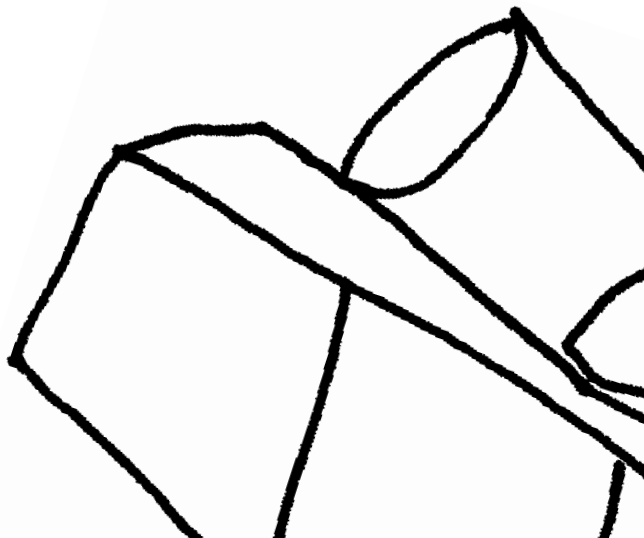
An entropy is initialised based on the value of **CV1** at power on and reset.

Each **PRG/ENT** advance button also advances the entropic state of the programs within an initialised group.

The **RATE OF ENTROPY** is randomly selected at power on and reset.

NOTE: advanced entropic states lead to coloured noise, silence, 1-bit audio, clipping and extreme waveshaping.

Long hold (2 secs +) **PRG/ENT** advance button and power on resets the group, program and entropy.



CONTROLS (typically)

CV1 (frequency/pitch)

CV2 (modulation rate)

PRG/ENT advance button

OUTPUT

3.5mm jack (stereo TRS or mono)

Jumper/header for mono summed (stereo TRS) or mono

Line level/headphone out

ON/OFF SWITCH

BATTERY POWERED

3v (AAA x2)

CV IN/HACKABLE

0 – 3v

5v compatible (CV1, CV2 and PRG/ENT advance button)

HEADER/PIN CONNECT

2 = VDD (3v)

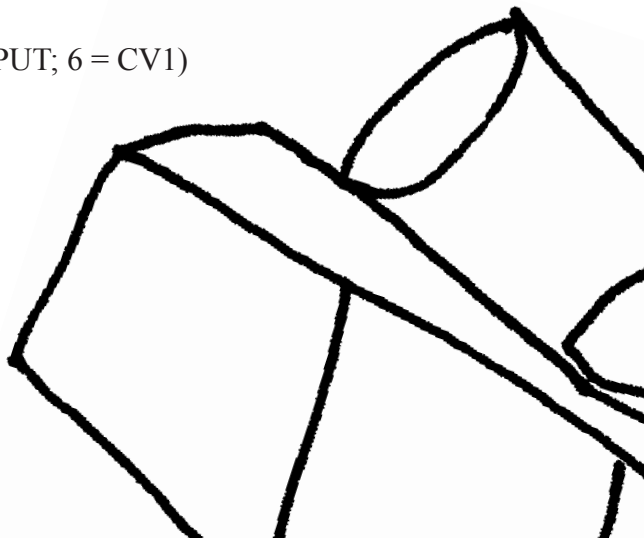
3 = GND

4 = RESET

7 = SWDIO/CV2

8 = SWCLK

(1 = PRG/ENT; 5 = OUTPUT; 6 = CV1)



CUSTOMISE THE CODE

The code for MORE ROAR! is available on GitHub under the CC license Attribution-Non-Commercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0). It can also be downloaded from the MORE ROAR!, Dirty Electronics and Agnes Cameron websites.

The file dialogues.h is included in the code: a conversation between Dirty Electronics (John Richards) and Agnes Cameron on DIY sound-making, critical sounds synthesis, coding, sound activism and more.

STM32G031(STM32G031J6M6) microcontroller
STM32CubeIDE v1.15.1 (code in C)
STM32CubeProgrammer v2.16.0

DISCLAIMER

The seller and author disclaim any liability for damages and injury that may result from the use, proper or improper, of MORE ROAR! There is no guarantee that the information found in this documentation is complete, safe or accurate.

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moreroar.org
dirtyelectronics.org
agnescameron.info
tellamont.world

